CLAIMS

1. (currently amended) A method of distributing routing information through a plurality of network devices, the plurality of network devices being members of a domain having a defined policy relating to forwarding of routing information, the method comprising:

receiving an information message at a network device in the domain, the information message having routing information <u>including information selected from a group including a route and a signaling protocol, the route including a destination</u>;

responsive to the information message being received from a network device external to the domain modifying the routing information by applying the defined policy of the domain to the routing information to produce policy filtered routing information, wherein the policy filtered routing information is selectively flooded to network devices internal to the domain responsive to the defined policy <u>and the destination of the route</u>; and

responsive to the information message being received from a network device internal to the domain, flooding the routing information to each of the plurality of network devices.

2. (original) The method as defined by claim 1 wherein the plurality of network devices are in a ring connectivity.

3. (previously presented) The method as defined by claim 1 wherein the plurality of network devices comprises at least three network devices, the at least three network devices including a defined network device that is connected with no more than one other of the plurality of network devices.

4. (previously presented) The method as defined by claim 1 wherein the step of selectively flooding the policy filtered routing information comprises adding a link state advertisement header to the policy filtered routing information.

5. (original) The method as defined by claim 1 wherein the policy filtered routing information comprises the received routing information in the information message.

6. (original) The method as defined by claim 1 further comprising storing the routing information in local data storage.

7. (previously presented) The method as defined by claim 1 wherein the defined policy is set by an administrator.

8. (currently amended) An apparatus for distributing routing information to a plurality of network devices, the plurality of network devices being members of a domain shared by the apparatus, each of member of the domain operating in accord with a defined policy relating to forwarding of routing information, the apparatus comprising:

an input coupled for receiving an information message having routing information the routing information selected from a group including a route and a signaling protocol, the route including a destination;

a policy module coupled with the input, the policy module operable to apply the defined policy of the domain only to information messages that are either received from or destined for network devices external to the domain to produce policy filtered routing information;

an output coupled with the policy module, the output selectively flooding the policy filtered routing information to each of the plurality of network devices in accordance with the defined policy and the destination of the route; and

flooding logic for flooding the received information message to the plurality of network devices responsive to the information message being received from a network device internal to the domain.

9. (previously presented) The apparatus as defined by claim 8 wherein the plurality of network devices are in a ring connectivity with the apparatus.

10. (previously presented) The apparatus as defined by claim 8 wherein the plurality of network devices comprises at least three network devices, the at least three network devices including a defined network device that is connected with no more than one other of the plurality of network devices.

11. (original) The apparatus as defined by claim 8 further comprising a link state module for adding a link state advertisement header to the policy filtered routing information.

12. (original) The apparatus as defined by claim 8 wherein the policy based routing information comprises the received routing information in the information message.

13. (original) The apparatus as defined by claim 8 further comprising memory for storing the routing information.

14. (previously presented) The apparatus as defined by claim 8 wherein the defined policy is set by an administrator.

15.(currently amended) A computer program product for use in a network device in a domain of network devices, the computer program product comprising a computer usable medium having computer readable program code thereon, the computer readable product code comprising:

program code for receiving an information message having routing information from a network device, the routing information selected from a group including a route and a signaling protocol, the route including a destination;

program code operable to either apply a defined policy of the domain to the information message if the information message was forwarded by an external peer network device external to the domain to provide policy filtered routing information, or to flood the information message if the information message was forwarded by an internal peer network device internal to the domain; and

program code for selectively flooding the policy filtered routing information to each peer network device in the domain in accordance with the defined policy of the domain and the destination associated with the route.

16. (previously presented) The computer program product as defined by claim 15 wherein the domain of network devices are in a ring connectivity.

17. (previously presented) The computer program product as defined by claim 15 wherein the domain of network devices comprises at least three network devices, the at least three network devices including a network device that is connected with no more than one other of the plurality of network devices.

18. (original) The computer program product as defined by claim 15 wherein the program code for flooding comprises program code for adding a link state advertisement header to the policy filtered routing information.

19. (original) The computer program product as defined by claim 15 wherein the policy filtered routing information comprises the received routing information in the information message.

20. (original) The computer program product as defined by claim 15 further comprising program code for storing the routing information in local data storage.

21. (previously presented) The computer program product as defined by claim 15 wherein the defined policy is set by an administrator.

22. (currently amended) A network device in a domain operating in accord with a defined policy relating to routing information, the network device comprising:

an input coupled with a network device, the input receiving an information message from the network device, the information message having routing information selected from a group including a route and a signaling protocol, the route including a destination;

a policy module coupled with the input, the policy module operable to apply the defined policy of the domain only to information messages that are either received from or destined for network devices external to the domain to produce policy filtered routing information; and

an output coupled with the policy module, the output selectively flooding the policy filtered routing information to each peer network device in the domain in accordance with the defined policy of the domain and the destination of the route;

flooding logic for flooding the received information message to the peer network devices in the domain responsive to the information message being received from a network device internal to the domain.

23. (original) The network device of claim 22 further comprising a link state module for adding a link state advertisement header to the policy filtered routing information.

24.(canceled)

25. (canceled)

26. (canceled)